

Summary of Monitoring and Control for the Mosquito Program for the Week ending September 2 2016

West Nile Virus (WNV) in and Around Boulder County

Mosquito activity is low throughout Boulder County as expected for this time in the season. Nuisance mosquitoes are still active in some areas of the county, including the Greenbelt Meadows neighborhood. But in the majority of the city, most mosquitoes are *Culex*. Although the percentage of *Culex* is high, their numbers are low. However, WNV was detected in some samples in all three zones of Boulder County last week. The risk of human transmission is slightly elevated and although mosquito numbers are low, the public is advised to take precautions to avoid mosquito bites.

Due to low mosquito activity around the state, the Colorado Department of Public Health and Environment has ended WNV testing of mosquitoes for the season. So far this year, there have been 49 confirmed human cases of WNV from the state of Colorado from the following counties: Adams (2); Arapahoe (1); Bent (2); Boulder (7); Broomfield (1); Douglas (1); El Paso (1); Gunnison (1); Larimer (19); Logan (1); Otero (3); Rio Blanco (1); Sedgwick (1); and Weld (8). Two deaths have been reported in Colorado. In Boulder County, all seven cases have been the uncomplicated form of the illness, West Nile fever. More WNV cases are likely to be reported in Colorado, since the majority of cases are confirmed during the months of August and September. The incubation period can take up to 14 days and the investigation by public health officials to confirm WNV can take up to a few weeks.

Although mosquito testing has ended, the city's mosquito contractor will continue trapping adult mosquitoes to monitor activity and larval breeding sites will also be monitored and treated.

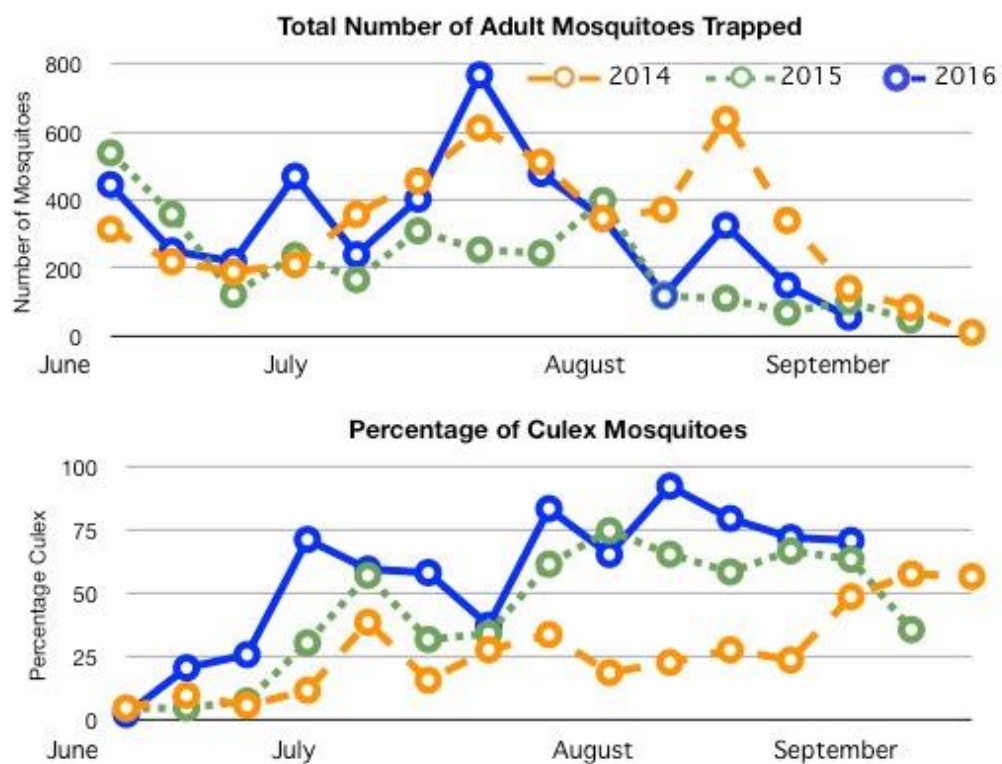
Adult Mosquito Trap Numbers

Adult mosquitoes are monitored from a grid of 16 traps located throughout the city. The mosquitoes are sorted and identified to species. *Culex* species from designated sentinel traps are sent to the Colorado Department of Public Health and Environment to be tested for the presence of WNV. The following table shows the results from surveillance traps.

Date	Total Mosquitoes	Number of <i>Culex</i> Mosquitoes	Percent <i>Culex</i> Mosquitoes	WNV Testing Results
June 7	477	12	2.5%	Not yet testing
June 14	253	53	29.9%	Negative
June 21	222	58	26.1%	Negative
June 28	472	338	71.6%	Negative
July 5	242	145	59.9%	Negative
July 12	405	237	58.5%	Negative
July 19	769	290	37.7%	Negative
July 26	480	424	88.3%	Positive

August 2	350	230	65.7%	Negative
August 9	124	115	92.7%	Positive
August 16	328	262	79.9%	Negative
August 23	152	110	72.4%	Positive
August 30	59	42	71.2%	Testing concluded

Weekly mosquito trap results will be charted throughout the season and the results from the previous two years will be included for comparison.



Nuisance Mosquito Program

Nuisance mosquito abundance and species composition can be compiled from 12 of the 16 WNV surveillance traps (four traps are specific for *Culex* mosquitoes), providing information about nuisance mosquito activity throughout the city. Two additional traps are placed in areas with high nuisance mosquito activity. These are located at the East Boulder Recreation Center and the Thorne Institute at the east side of Sombrero Marsh. “Floating” traps may also be set up to monitor areas of high mosquito activity. One is currently installed at the Greenbelt Meadows neighborhood.

The table below shows the adult nuisance mosquito counts in the three traps that are used for additional monitoring of nuisance mosquitoes, as well as the top five nuisance mosquito counts in WNV surveillance traps throughout the city.

Trap location	Number of Nuisance Mosquitoes (Number of <i>Culex</i>)
Greenbelt Meadows*	121 (9)
East Boulder Community Center*	13 (2)*
Tom Watson Park	5 (2)
Stazio Ball Fields	4 (2)
Sawhill Ponds	4 (1)
Thorne Institute*	3 (0)*
Christiansen Park	2 (14)
23rd and Meadow	1 (0)

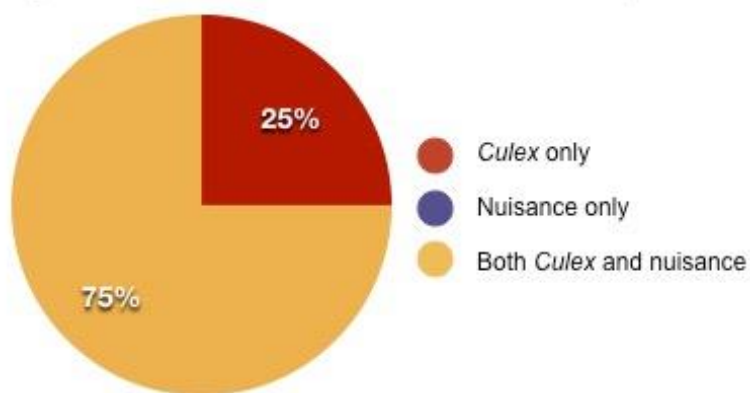
* Trap is from nuisance mosquito control program

Mosquito Larval Control Treatments

The week ending August 26, a total of 317 site inspections occurred and 16 were treated.

- Sites treated with *Culex*-only larvae: 4
- Sites treated with nuisance-only larvae: 12
- Sites treated with both *Culex* with nuisance larvae:

Percentage of sites treated for Culex and nuisance mosquitoes



If you have any questions, please contact Rella Abernathy at 303-441-1901.